

## AMENDMENTS TO THE CLAIMS

1-13. (Canceled)

14. (Currently Amended) A matrix-type display apparatus which drives a display panel including a plurality of pixels disposed in matrix form and displays an image, comprising:

a converting portion adapted to gamma-convert an input video signal, using  $n$  (which is an integer of two or above) pairs of gamma-characteristics each made up of first and second gamma-characteristics different from each other, the gamma-characteristics being a transmittance characteristic according to an input level, level and the  $n$  pairs of gamma-characteristics being different from each other; and

a selecting portion adapted to specify a transmittance to be used for display based on the input video signal, to select one pair of gamma-characteristics from among the  $n$  pairs of gamma-characteristics according to the specified transmittance to be used for display, and to select an output supplied to the display panel from among the  $2n$  outputs which are gamma-corrected by said converting portion, so that a ratio between a first distribution area of pixels driven by the video signal gamma-corrected by use of the first gamma-characteristic of the selected pairs of gamma-characteristics and a second distribution area of pixels driven by the video signal gamma-corrected by use of the second gamma-characteristic of the selected pairs of gamma-characteristics is equal to a distribution area ratio specified in advance for the selected pairs of gamma-characteristics, and with respect to a plurality of division ranges each division range being different and set by dividing a range of transmittance to be used for display, a different pair of gamma-characteristics and a different distribution area ratio are used,

wherein the selecting portion produces a synthetic gamma-characteristic which is a gamma-characteristic synthesized from the first gamma-characteristic and the second gamma-characteristic, by switching between the video signal gamma-corrected by use of the first gamma-characteristic of the selected pair of gamma-characteristics and the video signal gamma-corrected by use of the second gamma-characteristic of the selected pair of gamma-characteristics using the distribution area ratio and

with respect to each of the division ranges, the synthetic gamma-characteristic of the pair of gamma-characteristics produced by the selecting portion is closest to a reference gamma-characteristic at the front vision.

15. **(Previously Presented)** The matrix-type display apparatus according to claim 14, wherein a block comprises  $(n+1)$  pixels; and  
said selecting portion selects an output supplied to the display panel from among the  $2n$  outputs which are gamma-corrected by said converting portion, so that the ratio between the first distribution area and the second distribution area is equal to the distribution area ratio in the block.
16. **(Previously Presented)** The matrix-type display apparatus according to claim 15, wherein the ratio of the first distribution area per block with the area of the pixels per block and the ratio of the second distribution area per block with the area of the pixels per block for each pair of gamma-characteristics are selected out of  $k/(n+1)$  and  $(n+1-k)/(n+1)$ , where  $k$  is an integer of one to  $n$ .
17. **(Previously Presented)** The matrix-type display apparatus according to claim 14, wherein:  
a block comprises one pixel;  
each pixel of the display panel is made up of, as one pixel, a first sub-pixel which has a first pixel area  $S_a$  and a second sub-pixel which has a second pixel area  $S_b (=m \times S_a, \text{ herein, } m > 1)$ ; and  
said selecting portion selects an output supplied to the display panel from among the  $2n$  outputs which are gamma-corrected by said converting portion, so that the ratio of the first distribution area and the second distribution area is equal to the distribution area ratio in the block.
18. **(Previously Presented)** The matrix-type display apparatus according to claim 17, wherein the ratio of the first distribution area with the area of the pixel and the ratio of the second distribution area with the area of the pixel for each pair of gamma-characteristics are selected out of  $1/(m+1)$  and  $m/(m+1)$ .

19. **(Previously Presented)** The matrix-type display apparatus according to claim 18, wherein the second pixel area  $S_b$  satisfies the relation of  $1.5S_a \leq S_b \leq 3S_a$ .
20. **(Previously Presented)** The matrix-type display apparatus according to claim 14, wherein:  
each pixel of the display panel is made up of, as one pixel, a first sub-pixel which has a first pixel area  $S_a$  and a second sub-pixel which has a second pixel area  $S_b (=m \times S_a$ , herein,  $m > 1$ ); and  
a block comprised two pixels; and  
said selecting portion selects an output supplied to the display panel from among the  $2n$  outputs which are gamma-corrected using each gamma-characteristic by said converting portion, so that ratio of the first distribution area and the second distribution area is equal to the distribution area ratio in the block.
21. **(Previously Presented)** The matrix-type display apparatus according to claim 20, wherein the ratio of the first distribution area with the area of the block and the ratio of the second distribution area with the area of the block for each pair of gamma-characteristics are selected from among  $1/(2+2m)$ ,  $m/(2+2m)$ ,  $2/(2+2m)$ ,  $(1+m)/(2+2m)$ ,  $2m/(2+2m)$ ,  $(2+m)/(2+2m)$ , and  $(2m+1)/(2+2m)$ .
22. **(Previously Presented)** The matrix-type display apparatus according to claim 21, wherein the second pixel area  $S_b$  satisfies the relation of  $1.2S_a \leq S_b \leq 2S_a$ .
23. **(Previously Presented)** The matrix-type display apparatus according to claim 14, wherein said selecting portion selects an output supplied to the display panel from among the  $2n$  outputs which are gamma-corrected by said converting portion, in a pixel made up of a red-pixel, a green-pixel and a blue-pixel.
24. **(Previously Presented)** The matrix-type display apparatus according to claim 14, wherein said selecting portion selects an output supplied to the display panel from among the  $2n$

outputs which are gamma-corrected by said converting portion, for each of a red-pixel, a green-pixel and a blue-pixel comprised by one pixel.

25. **(Previously Presented)** The matrix-type display apparatus according to claim 14, wherein the display panel is a liquid-crystal display panel.

26. **(Currently Amended)** A driving method for a matrix-type display apparatus which drives a display panel including a plurality of pixels disposed in matrix form and displays an image, comprising:

a converting step of gamma-converting an input video signal, using  $n$  (which is an integer of two or above) pairs of gamma-characteristics which are made up of first and second gamma-characteristics different from each other, the gamma-characteristics being a transmittance characteristic according to an input level, level and the  $n$  pairs of gamma-characteristics being different from each other; and

a selecting step of specifying a transmittance to be used for display based on the input video signal, selecting one pair of gamma-characteristics from among the  $n$  pairs of gamma-characteristics according to the specified transmittance to be used for display, and selecting an output supplied to the display panel from among the  $2n$  outputs which are gamma-corrected in the converting step, so that a ratio between a first distribution area of pixels driven by the video signal gamma-corrected by use of the first gamma-characteristic of the selected pairs of gamma-characteristics and a second distribution area of pixels driven by the video signal gamma-corrected by use of the second gamma-characteristic of the selected pairs of gamma-characteristics is equal to a distribution area ratio specified in advance for the selected pairs of gamma-characteristics and with respect to a plurality of division ranges each division range being different and set by dividing a range of transmittance to be used for display, a different pair of gamma-characteristics and a different distribution area ratio are used,

wherein the selecting step produces a synthetic gamma-characteristic which is a gamma-characteristic synthesized from the first gamma-characteristic and the second gamma-characteristic, by switching between the video signal gamma-corrected by use of the first gamma-characteristic of the selected pair of gamma-characteristics and the video signal gamma-

corrected by use of the second gamma-characteristic of the selected pair of gamma-characteristics using the distribution area ratio and  
with respect to each of the division ranges, the synthetic gamma-characteristic of the pair of gamma-characteristics produced by the selecting step is closest to a reference gamma-characteristic at the front vision.